IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Claim 1. (Currently Amended) A color cathode ray tube comprising:

a panel provided with a phosphor screen;

an electron gun for emitting an electron beam toward the phosphor screen; and

a shadow mask assembly located between the phosphor screen and the electron gun,

the shadow mask assembly including

a shadow mask body having a rectangular effective portion opposed to the phosphor screen and formed having a large number of electron beam passage apertures, the effective portion having a major axis and a minor axis passing through the center thereof and extending at right angles to each other,

a mask frame to which the periphery of the shadow mask body is fixed, and

an auxiliary mask in the form of a strip extending in the direction of the minor axis, fixed to a region [~~containing the minor axis of the effective portion~~] having a width within 1/3 of the length of the shadow mask body in the direction of the major axis and situated in a longitudinal central region of the effective portion containing the minor axis, and having a number of electron beam passage apertures communicating individually with the electron beam passage apertures of the effective portion.

Claim 2. (Cancel)

Claim 3. (Presently Amended) A color cathode ray tube according to claim [[2]]1, wherein said auxiliary mask has a central axis extending in the longitudinal direction thereof and is located in a manner such that the central axis overlaps the minor axis of the shadow mask body.

Claim 4. (Presently Amended) A color cathode ray tube according to claim [[2]]1, wherein said auxiliary mask is in the form of a strip having a lengthwise dimension greater than the length of the effective portion of the shadow mask body in the direction of the minor axis and a crosswise dimension smaller than the length of the effective portion in the direction of the major axis.

Claim 5. (Original) A color cathode ray tube according to claim 4, wherein said shadow mask body has a skirt portion provided around the effective portion and bent along a tube axis, and said auxiliary mask has an effective portion formed having the electron beam passage apertures and non-effective portions provided individually at the opposite ends of the effective portion with respect to the direction of the minor axis, the non-effective portions of the auxiliary mask being bent so as to be superposed on the skirt portion and fixed to the skirt portion.

Claim 6. (Original) A color cathode ray tube according to claim 1, wherein said auxiliary mask is formed of a material having a coefficient of thermal expansion substantially equal to that of the material of the shadow mask body.

Claim 7. (Original) A color cathode ray tube according to claim 1, wherein said auxiliary mask has a thickness equal to or greater than that of the shadow mask body.

Claim 8. (Original) A color cathode ray tube according to claim 5, wherein the length of the effective portion of said auxiliary mask in a longitudinal direction thereof is greater than the length of the effective portion of the shadow mask body in the direction of the minor axis.

Claim 9. (Original) A color cathode ray tube according to claim 1, wherein each electron beam passage aperture of the auxiliary mask has an aperture diameter larger than that of each electron beam passage aperture of the shadow mask body with respect to at least one of the respective directions of the major and minor axes.

Claim 10. (Original) A color cathode ray tube according to claim 1, wherein said auxiliary mask is provided on the electron-gun side of the shadow mask body, and the space between the electron beam passage apertures of said auxiliary mask is smaller than the space between the electron beam passage apertures of the shadow mask body with respect to at least one of the respective directions of the major and minor axes.

Claim 11. (Original) A color cathode ray tube according to claim 10, wherein each electron beam passage aperture of the shadow mask body is formed of a larger hole opening on the phosphor-screen side and a smaller hole opening on the electron-gun side, and each electron beam passage aperture of the auxiliary mask is formed of a smaller hole opening on the phosphor-screen side and a larger hole opening on the electron-gun side.

Claim 12. (Original) A color cathode ray tube according to claim 1, wherein said auxiliary mask is provided on the phosphor-screen side of the shadow mask body, and the space between the electron beam passage apertures of said auxiliary mask is greater than the space between the electron beam passage apertures of the shadow mask body with respect to

at least one of the respective directions of the major and minor axes.

Claim 13. (Original) A color cathode ray tube according to claim 12, wherein each electron beam passage aperture of the shadow mask body is formed of a larger hole opening on the phosphor-screen side and a smaller hole opening on the electron-gun side, and each electron beam passage aperture of the auxiliary mask is formed of a larger hole opening on the phosphor-screen side and a smaller hole opening on the electron-gun side.

Claim 14. (Original) A color cathode ray tube according to claim 1, wherein said shadow mask body has a plurality of aperture arrays extending parallel to the minor axis and arranged at spaces in the direction of the major axis, each of the aperture arrays including electron beam passage apertures arranged in the direction of the minor axis and bridge portions situated between adjacent electron beams passage apertures, and

said auxiliary mask has a plurality of aperture arrays extending parallel to the minor axis and arranged at spaces in the direction of the major axis, each of the aperture arrays including electron beam passage apertures arranged in the direction of the minor axis and bridge portions situated between adjacent electron beams passage apertures,

each of the electron beam passage apertures of the auxiliary mask having a minor-axis-direction diameter twice or more as large as the minor-axis-direction diameter of each electron beam passage aperture of the shadow mask body, the minor-axis-direction space between the electron beam passage apertures of the auxiliary mask being twice as long as the minor-axis-direction space between the electron beam passage apertures of the shadow mask body,

the bridge portions of the auxiliary mask being superposed individually on the bridge portions of the shadow mask body.

Claim 15. (Original) A color cathode ray tube according to claim 1, wherein said shadow mask body has a plurality of aperture arrays extending parallel to the minor axis and arranged at spaces in the direction of the major axis, each of the aperture arrays including electron beam passage apertures arranged in the direction of the minor axis and bridge portions situated between adjacent electron beams passage apertures, and

said auxiliary mask has a plurality of aperture arrays extending parallel to the minor axis and arranged at spaces in the direction of the major axis, each of the aperture arrays including electron beam passage apertures arranged in the direction of the minor axis and bridge portions situated between adjacent electron beams passage apertures,
the effective portion of the shadow mask body having a superposed region overlapping the auxiliary mask and a non-superposed region situated outside the superposed region,

a minor-axis-direction space between the electron beam passage apertures in the superposed region being twice as long as the minor-axis-direction space between the electron beam passage apertures in the non-superposed region, the minor-axis-direction space between the electron beam passage apertures of the auxiliary mask being twice as long as the minor-axis-direction space between the electron beam passage apertures in the non-superposed region,

the bridge portions of the auxiliary mask being located individually on the bridge portions of the shadow mask body so as to be shifted in the direction of the minor axis by a margin equal to 1/2 of the minor-axis-direction space between the electron beam passage apertures of the auxiliary mask.

Claim 16. (Previously Presented) A color cathode rate tube comprising:

a panel provided with a phosphor screen;

an electron gun for emitting an electron beam toward the phosphor screen; and

a shadow mask assembly located between the phosphor screen and the electron gun,

the shadow mask assembly including,

a shadow mask body having a rectangular effective portion opposed to the phosphor screen, the effective portion having a major axis and a minor axis passing through the center thereof and extending at right angles to each other and having a large number of electron beam passage apertures,

a mask frame to which the periphery of the shadow mask body is fixed, and

an auxiliary mask in the form of a strip extending in the direction of the minor axis, being fixed to a region containing the minor axis of the effective portion, having a number of electron beam passage apertures communicating individually with the electron beam passage apertures of the effective portion, and having a crosswise dimension smaller than a length of the effective portion in the direction of the major axis.

Claim 17. (New) A color cathode ray tube comprising:

a panel provided with a phosphor screen;

an electron gun for emitting an electron beam toward the phosphor screen; and

a shadow mask assembly located between the phosphor screen and the electron gun,

the shadow mask assembly including

a shadow mask body having a rectangular effective portion opposed to the phosphor screen and formed having a large number of electron beam passage apertures, the effective

portion having a major axis and a minor axis passing through the center thereof and extending at right angles to each other,

a mask frame to which the periphery of the shadow mask body is fixed, and

an auxiliary mask in the form of a strip extending in the direction of the minor axis, fixed to a region containing the minor axis of the effective portion, and having a number of electron beam passage apertures communicating individually with the electron beam passage apertures of the effective portion;

said shadow mask body having a plurality of aperture arrays extending parallel to the minor axis and arranged at spaces in the direction of the major axis, each of the aperture arrays including electron beam passage apertures arranged in the direction of the minor axis and bridge portions situated between adjacent electron beams passage apertures;

said auxiliary mask having a plurality of aperture arrays extending parallel to the minor axis and arranged at spaces in the direction of the major axis, each of the aperture arrays including electron beam passage apertures arranged in the direction of the minor axis and bridge portions situated between adjacent electron beams passage apertures; and

each of the electron beam passage apertures of the auxiliary mask having a minor-axis-direction diameter twice or more as large as the minor-axis-direction diameter of each electron beam passage aperture of the shadow mask body, the minor-axis-direction space between the electron beam passage apertures of the auxiliary mask being twice as long as the minor-axis-direction space between the electron beam passage apertures of the shadow mask body,

the bridge portions of the auxiliary mask being superposed individually on the bridge portions of the shadow mask body.

Claim 18. (New) A color cathode ray tube comprising:

a panel provided with a phosphor screen;

an electron gun for emitting an electron beam toward the phosphor screen; and

a shadow mask assembly located between the phosphor screen and the electron gun,

the shadow mask assembly including

a shadow mask body having a rectangular effective portion opposed to the phosphor screen and formed having a large number of electron beam passage apertures, the effective portion having a major axis and a minor axis passing through the center thereof and extending at right angles to each other,

a mask frame to which the periphery of the shadow mask body is fixed, and

an auxiliary mask in the form of a strip extending in the direction of the minor axis, fixed to a region containing the minor axis of the effective portion, and having a number of electron beam passage apertures communicating individually with the electron beam passage apertures of the effective portion;

said shadow mask body having a plurality of aperture arrays extending parallel to the minor axis and arranged at spaces in the direction of the major axis, each of the aperture arrays including electron beam passage apertures arranged in the direction of the minor axis and bridge portions situated between adjacent electron beams passage apertures;

said auxiliary mask having a plurality of aperture arrays extending parallel to the minor axis and arranged at spaces in the direction of the major axis, each of the aperture arrays including electron beam passage apertures arranged in the direction of the minor axis and bridge portions situated between adjacent electron beams passage apertures,

the effective portion of the shadow mask body having a superposed region overlapping the auxiliary mask and a non-superposed region situated outside the superposed region;

a minor-axis-direction space between the electron beam passage apertures in the superposed region being twice as long as the minor-axis-direction space between the electron beam passage apertures in the non-superposed region, the minor-axis-direction space between the electron beam passage apertures of the auxiliary mask being twice as long as the minor-axis-direction space between the electron beam passage apertures in the non-superposed region; and

the bridge portions of the auxiliary mask being located individually on the bridge portions of the shadow mask body so as to be shifted in the direction of the minor axis by a margin equal to 1/2 of the minor-axis-direction space between the electron beam passage apertures of the auxiliary mask.